

Does the EAF (Egyptian Air Force) operate the AMX?

By: Dino Ramsey, January 2013



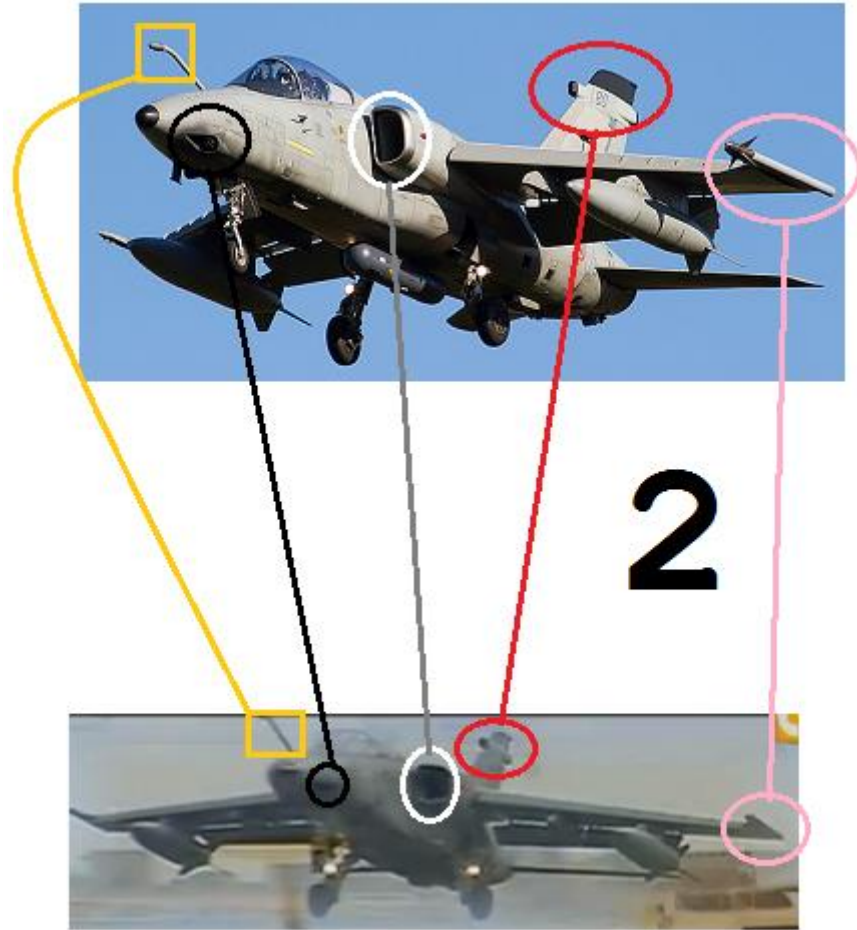
There has been a lot of speculation lately regarding the AMX ground-attack combat jet and if the EAF (Egyptian Air Force) does in fact operate the type, as there are no information available on it in open sources. The speculation came after a number of promotional videos were released by the EAF recently and were aired on different TV and satellite channels showing what appears to be an AMX attack jet. In those videos (more than one), we see what appears to be an AMX. Although the quality of the images in the videos are poor to fair, some thought that combat jet in the video is an L-39 Albatros or a L-59 Super Albatros, both are operated by the EAF but with close examination of those images we can determine with a good degree of certainty that the jet flying in those videos is indeed an AMX, not L-39 or L-59s. Here is a quick comparison from one of the more clear videos I found:



1



Picture 1 : Above, an AMX of the Italian Air Force, below is the EAF mystery jet that appeared in the promotional video, before going into any details you can see the clear resemblance between the two.



Picture 2: In this picture we can take a look of some identifying details that will give clues to what kind of combat jet we have. First the **Yellow** is pointing out to the refueling probe, which neither the L-39 or the L-59 have (not the ones in the EAF's inventory, and both are NOT offered with it period). The **Black** points to the cannon on the port-side of the fuselage, in the Italian AMXs it is the M-61 Vulcan 20mm (20×102mm cartridges) rotary cannon, used on most American Fixed-Wing fighters while the Brazilian AMXs (designated A-1A by the Brazilians) are equipped with two French DEFA-554 30mm (30×113 mm cartridges) revolver cannons, one on the port-side of the fuselage and the other on the starboard side as shown in the picture below, making the EAF's examples of Italian origin rather that Brazilian.

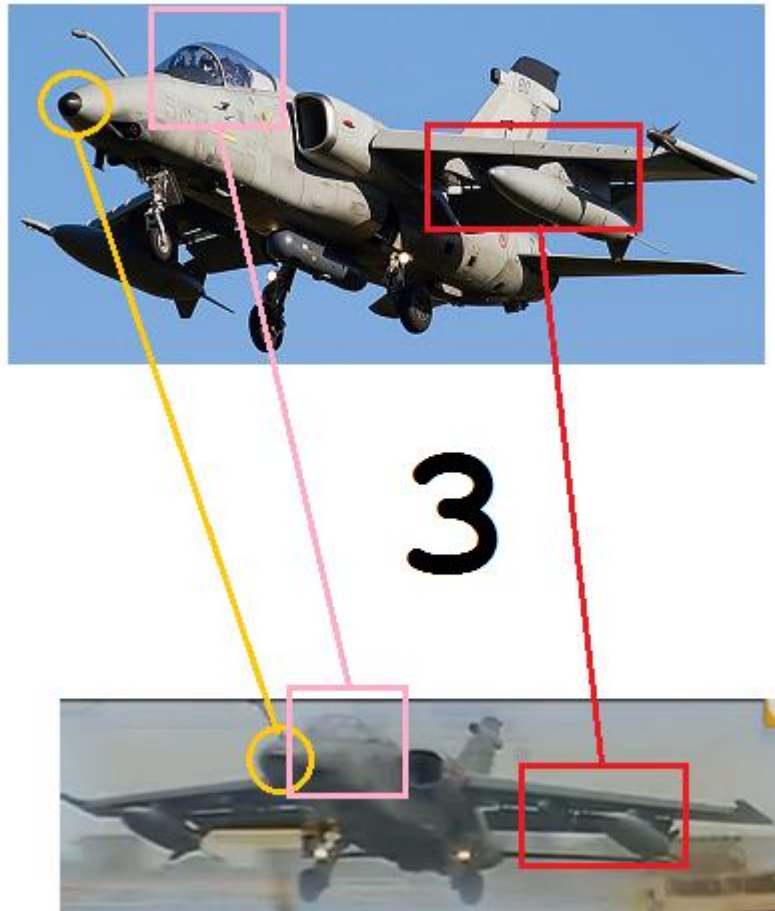


Brzailian AF AMX



Italian AF AMX

The **White** marks the distinctive air-intakes shape of the AMX which is similar in both pictures and its position in relevance to the wings indicate that the EAF jet shown in the video is NOT a L-39 or L-59 as the air-intakes on both are below the wing-roots. The **Red** points to the distinctive RWR (Radar Warning Receiver) on the tail fin (found on both Italian and Brazilian examples). The **Purple** points out the distinctive wing-tip station, although in the top example (The Italian) it is loaded, while in the EAF's example its empty.



Picture 3: In this picture I continue pointing out similarities, the **Yellow** marks the similar black-tipped radome common in all AMX examples, while the **Purple** points to the similarity in canopy shape between the two examples and last the **RED** points to the similar number of wing hard-points (AMX has a total of 7, 2 under each wing, 2 on both wing-tips and one centerline) on both examples.



This is another picture from another promotional video released by the EAF shows the same mystery jet in formation with other known EAF combat jet, in this particular part of the picture flying alongside a Mirage-5 (could also be a Mirge-2000) to the right and an F-4E to the left.

We see from those comparisons that the two examples are identical, the general shape of the two examples is the same and by examining more specific details we can see that this EAF jet is most probably an AMX of Italian origin. Now let us take a quick look at the AMX Attack jet. It is made by the company AMX International which is a joint venture between Italy and Brazil with the Italian companies Alenia Aerospazio, now Alenia Aeronautica, (46.5%) and Aermacchi (23.8%) and the Brazilian company Embraer (29.7%). The AMX is designated **A-1** by the Brazilian AF, and **A-11 Ghibli** by the Italian AF. It is a ground attack - close air support aircraft and can be used in reconnaissance missions also. It is a high subsonic speed jet capable of flying low, day or night and in any weather conditions. It is also designed to operate from unprepared \ rough runways. The AMX is similar in role, and layout, to the Russian Sukhoi Su-25 (NATO code-name Frogfoot) although the AMX is an all around more capable combat jet. The AMX is more versatile that it can fill many roles, not just ground attack, it can also be used for long-range strike and close air support. It is in essence a small size fighter-bomber, as it is equipped with a radar and can carry a variety of air-to-air missiles, giving it a limited lead-in fighter role, something that is not available on the Su-25. As for performance, the AMX can climb at the rate of 50.06m/s. The maximum speed is 1,053km/h. The range and service ceiling of the aircraft are 889km and 13,000m respectively. What is of particular interest in the AMX, which can also explain why the EAF has kept it a secret, at least from the public is the Radar. Like modern jets, the avionics systems are pallet mounted for fast and efficient access for service and maintenance. The modularity of the systems allows alternative or upgraded systems to be installed. The aircraft is also equipped with UHF and VHF communications and an identification friend or foe (IFF) interrogator. The Radar on the AMX is the **SCP-01** radar system developed through a joint-venture company between the Brazilian MECTRON company and the Italian SELEX Galileo company. Open sources indicate that the SCP-01 radar itself is based on an Israeli radar built by ELTA systems of Israel, probably the **ELM-2032**. The ELM-2032 is an advanced Multimode Airborne Fire Control Radar designed for multirole fighters, oriented for both air-to-air and strike missions. It can be fitted to the F-16, F-5, Mirage-III, F-4, Mig 21 and most important, it is the radar installed on the Venezuelan AF AMXs.

The reasons why the EAF never disclosed it owns and operates the AMX is unknown, and the fact that the EAF kept this purchase a secret is also unknown, and what is more confusing is the fact that they decided to show the AMX in public through flying it in formation with other EAF combat jets in celebrations and ceremonies! The simple hint to the fact that there might be Israeli technology involved might be the explanation why the EAF does not feel like publicizing the AMX, although it might be very limited technology, and the AMX is a very capable combat jet, and it fills many roles, unlike other combat jets that mainly focus on the ground-attack role like the Russian Su-25 and the American A-10 Thunderbolt-II. The AMX fills the same role and then some, like mentioned above, and for that role there aren't many options on the open market, and for all honesty the AMX would be the best choice for many reasons. At the end this article is not meant to go into the pros and cons of the AMX, it simply answers the question, does the EAF operate the AMX? From the evidence we have on hand, and also given the EAF's need for a dedicated ground-attack jet, the answer is YES, that mystery aircraft in those videos that had so many talking and arguing is in fact the AMX, and an example similar to the Italian AF's AMXs. The Egyptian military has a long history of secrecy, and this continues to this day, but at least we had a glimpse of the AMX and we know now that the EAF does indeed have some of them.

Sources:

<http://www.wikipedia.com/>

<http://www.mectron.com.br/>

<http://www.degal.com/>

<http://www.iai.co.il/>

© 2013 by **Dino Ramsey** – More at <http://ramzytx.wix.com/middleeastaffairs>